

[ABSTRACT OF THE DISCLOSURE]

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The present invention relates to a panel display device for adjusting color and quantity of light selectively by forming a hologram pattern on a liquid crystal. Specifically, since the present invention does not use the polarization plates and so on, the loss of light is reduced, and the brightness of the picture can be increased by effectively controlling the light. And, since the present invention does not require the additional filter comprising the panel display device, the manufacturing process is simplified, and a super-thin display system can be implemented. And, since the light in the optical waveguide path is reused, the use efficiency of the light can be heightened. And, since LED, LD, and so on, is used as a light source, the range of color representation is widened, thereby implementing a display device having clear picture quality.

[TYPICAL DRAWING]

FIG. 2

[INDEX WORDS]

hologram pattern liquid crystal, waveguide